



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,277	06/24/2003	Michael W. Nebel	03,059	9129
7278	7590	08/24/2004	EXAMINER	
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			HARRIS, ANTON B	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 08/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No. 10/602,277	Applicant(s) NEBEL, MICHAEL W.	
	Examiner Anton B Harris	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2003.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>24 June 2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-13, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grant et al. (6,501,020 B2 cited by Applicant) in view of Saxby et al. (6,326,547 B1).

Regarding claim 1, Grant et al. (col. 7, line 28- col. 8, line 67) discloses a line carrier comprising:

an elongated strip 40 of flexible material, said elongated strip 40 having opposite ends;
a first end 48 of said strip 40 being connected to a first structure of said relatively stationary structure 28, 30 and said relatively movable structure 24;

a second end 46 of said strip being connected to a second structure of said relatively stationary structure 28, 30 and relatively movable structure 24; and

at least one retainer feature 44 connecting said line member 18 relative to said strip 40 at a location along said strip 40 between said first 48 and second 46 ends thereof, but lacks that a second end of a strip is pivotally connected to a second structure.

Saxby et al. (figure 2) teaches that a second end of a strip 100 is pivotally connected to a second structure 105.

Art Unit: 2831

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Grant et al. by providing that a second end of a strip is pivotally connected to a second structure in order to provide a movable shelf in view of the teachings of Saxby et al.

Regarding claims 2 and 11, Grant et al. (col. 7, line 28- col. 8, line 67) discloses a fastener receiving aperture 49 formed through said strip 40 said first end 48; and

a fastener (see figure 2) being received through said aperture 49 to secure said first end 48 of said strip to said first structure 28, 30.

Regarding claims 3 and 12, the teachings of Saxby et al. further include a cylindrical pivot sleeve (see figure 10 to the right of reference line 304) secured to said second end of said elongate strip 100;

a pivot pin (see figure 10 to the right of reference line 304 within the sleeve) secured to said second structure 105 and

said sleeve (see figure 10 to the right of reference line 304) being received over said pivot pin (see figure 10 to the right of reference line 304 within the sleeve) to pivotally connect said second end of said strip 100 to said second structure 105.

Regarding claim 4, Grant et al. (col. 7, line 28- col. 8, line 67) discloses a plurality of retainer features 44 spaced along said strip 40.

Furthermore, the limitations of “for connecting line member relative to said strip” in claim 4 has been considered, but does not result in a structural difference. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed

Art Unit: 2831

does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claim 5, Grant et al. (col. 7, line 28- col. 8, line 67) discloses a retainer plate 44 having at least one line receiving aperture (see figure 2) formed therethrough and sized and shaped to enable a line member 18 to extend therethrough.

Regarding claims 7 and 15, Grant et al. (col. 7, line 28- col. 8, line 67) discloses that the strip 40 is formed of an elongated strip of flexible spring material.

Regarding claim 8, Grant et al. (col. 7, line 28- col. 8, line 67) discloses that the first end 48 of the strip 40 is secured to said relatively movable structure 24, said second end is pivotally connected to said relatively stationary structure 28, 30.

Regarding claims 9 and 16, Grant et al. (col. 7, line 28- col. 8, line 67) discloses that said movable structure 24 is translatable relative to said stationary structure 28, 30 in a direction of travel;

said first end 48 of said strip 40 is positioned in substantial alignment with said second end 46 along a line substantially parallel to said direction of travel; and

said first end 48 and said second end 46 remain in said substantially alignment throughout translation of said movable structure 24 relative to said stationary structure 28, 30.

Regarding claim 10, Grant et al. (col. 7, line 28- col. 8, line 67) discloses a line carrier comprising:

an elongated strip 40 of flexible material, said strip 40 having opposite ends and extending arcuately between said opposite ends 48, 46;

a first end 48 of said strip 40 being secured to said stationary structure 28, 30;

Art Unit: 2831

a second end 46 of said strip being connected to said stationary structure 28, 30 and;
a plurality of retainer members 44 connecting said wires and/or tubes 18 to said strip 40 at a plurality of locations spaced along said strip 40 between said opposite ends 48, 46 thereof in such a manner that said wires and/or tubes follow said strip during movement of said movable structure 24, but lacks that a second end of a strip is pivotally connected to a second structure.

Saxby et al. (figure 2) teaches that a second end of a strip 100 is pivotally connected to a second structure 105.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Grant et al. by providing that a second end of a strip is pivotally connected to a second structure in order to provide a movable shelf in view of the teachings of Saxby et al.

Regarding claim 13, Grant et al. (col. 7, line 28- col. 8, line 67) discloses a fastener receiving aperture 49 formed through said strip 40 said first end 48; and

a fastener (see figure 2) being received through said aperture 49 to secure said first end 48 of said strip to said first structure 28, 30, and the teachings of Saxby et al. further include a cylindrical pivot sleeve (see figure 10 to the right of reference line 304) secured to said second end of said elongate strip 100;

a pivot pin (see figure 10 to the right of reference line 304 within the sleeve) secured to said second structure 105 and

said sleeve (see figure 10 to the right of reference line 304) being received over said pivot pin (see figure 10 to the right of reference line 304 within the sleeve) to pivotally connect said second end of said strip 100 to said second structure 105.

Art Unit: 2831

3. Claims 6, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grant et al. in view of Saxby et al. as applied to claims 5 and 10 respectively above, and further in view of Milicent et al. (5,169,100).

Regarding claims 6 and 14, Grant et al. Modified as taught by Saxby et al. discloses a retainer plate 44 of Grant et al. being selectively positioned along said strip 40, but lacks a strip receiving slot, and a retainer plate having a strip received through a slot.

Milicent et al. (figure 7) teaches a strip receiving slot 14, and a retainer plate 10 having a strip 18 received through a slot 14.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the modified device of Grant et al. by providing a strip receiving slot, and a retainer plate having a strip received through a slot in order to ensure stability of the cables in view of the teachings of Milicent et al.

4. Claims 17, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grant et al. in view of Saxby et al. and DiBiagio et al. (5,951,082 cited by Applicant).

Regarding claim 17, Grant et al. (col. 7, line 28- col. 8, line 67) discloses a line carrier comprising:

an elongated strip 40 of flexible material, said strip 40 having opposite ends and extending arcuately between said opposite ends 48, 46;

a first end 48 of said strip 40 being secured to said stationary structure 28, 30;

a second end 46 of said strip being connected to said stationary structure 28, 30 and;

a plurality of retainer features 44 positioned along said strip 40 and engaging said wires and/or tubes 18 with said strip 40 at a plurality of locations spaced along said strip between said

Art Unit: 2831

opposite ends 48, 46 thereof in such a manner that said wires and/or tubes follow said strip during movement of a structure 24,

a movable structure 24 is translatable relative to said stationary structure 28, 30 in a direction of travel;

said first end 48 of said strip 40 is positioned in substantial alignment with said second end 46 along a line substantially parallel to said direction of travel; and

said first end 48 and said second end 46 remain in said substantially alignment throughout translation of a movable structure 24 relative to a stationary structure 28, 30, but lacks that a second end of a strip having a cylindrical pivot sleeve secured thereto and a sleeve being received over a pivot pin secured to a structure to thereby pivotally connect a second end of said strip to said structure, and a vehicle structure and a movable room structure.

Saxby et al. (figure 2) teaches that a second end of a strip 100 is pivotally connected to a second structure 105. that a second end of a strip 100 having a cylindrical pivot sleeve (see figure 10 to the right of reference line 304) secured thereto and a sleeve (see figure 10 to the right of reference line 304) being received over a pivot pin (see figure 10 to the right of reference line 304 within the sleeve) secured to a structure to thereby pivotally connect a second end of said strip 100 to said structure 105.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Grant et al. by providing that a second end of a strip having a cylindrical pivot sleeve secured thereto and a sleeve being received over a pivot pin secured to a structure to thereby pivotally connect a second end of said strip to said structure in order to provide a movable shelf in view of the teachings of Saxby et al.

Art Unit: 2831

DiBiagio et al. (abstract) teaches a vehicle structure 10 and a movable room structure 12.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the modified device of Grant et al. by providing a vehicle structure and a movable room structure in order to provide a means for expanding living space in view of the teachings of DiBiagio et al.

Regarding claim 18, Grant et al. (col. 7, line 28- col. 8, line 67) discloses a fastener receiving aperture 49 formed through said strip 40 said first end 48; and

a fastener (see figure 2) being received through said aperture 49 to secure said first end 48 of said strip to said structure 28, 30.

Regarding claim 20, Grant et al. (col. 7, line 28- col. 8, line 67) discloses that the strip 40 is formed of an elongated strip of flexible spring material.

Regarding claim 21, Grant et al. (col. 7, line 28- col. 8, line 67) discloses a line carrier comprising:

an elongated strip 40 of flexible material,

a first end 48 of said strip 40 being connected to a movable structure 24;

a second end 46 of said strip being connected to a stationary structure 28, 30 below a stationary structure 28, 30;

at least one retainer feature 44 connecting said line member 18 relative to said strip 40 at a location along said strip 40 between said first 48 and second 46 ends thereof, but lacks that at least one of first and second ends of a strip is pivotally connected to a first and second structure, and a vehicle and a slide-out room.

Saxby et al. (figure 2) teaches that at least one of first and second ends of a strip 100 is pivotally connected to a first 104 and second 105 structure a second end of a strip 100 is pivotally connected to a second structure 105.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Grant et al. by providing that a second end of a strip is pivotally connected to a second structure in order to provide a movable shelf in view of the teachings of Saxby et al.

DiBiagio et al. (abstract) teaches a vehicle 10 and a slide-out room 12.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the modified device of Grant et al. by providing a vehicle and a slide-out room in order to provide a means for expanding living space in view of the teachings of DiBiagio et al.

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grant et al. in view of Saxby et al. and DiBiagio et al. as applied to claim 17 above, and further in view of Milicent et al. (5,169,100).

Regarding claim 19, Grant et al. Modified as taught by Saxby et al. and DiBiagio et al. discloses the invention substantially as claimed, but lacks a strip receiving slot, and a retainer plate having a strip received through a slot.

Milicent et al. (figure 7) teaches a strip receiving slot 14, and a retainer plate 10 having a strip 18 received through a slot 14.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the modified device of Grant et al. by providing a strip receiving

Art Unit: 2831

slot, and a retainer plate having a strip received through a slot in order to ensure stability of the cables in view of the teachings of Milicent et al.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Meier U.S. Patent No. 6,215,068 B1 discloses a line guiding assembly.

Willmann U.S. Patent No. 5,746,389 discloses a line guiding assembly including pivoting connections.

Cignoni, Jr. U.S. Patent No. 3,710,199 discloses a cable carrier assembly including pivoting connections.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anton B Harris whose telephone number is (571) 272-1976. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dean Reichard, can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

abh

8/21/04


DEAN A. REICHARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800